

APPLICATION TRANSFER REQUEST FOR S.N. [REDACTED]

Section I. TRANSFER REQUEST BY (PRINT NAME) _____

Date 10-13

TO: Art Unit 2827

Class/sub 174/252+

FROM: A.U. 1772 Class 428

REASON:

printed circuit

Gatekeeper concurrence _____

Hand carried: Personally accepted by _____

Section II a. DISPOSITION BY RECEIVING TC By: _____ A.U. _____ Date _____

☐ ACCEPTED BY RECEIVING T.C.

NOT ACCEPTED

☐ Forward to receiving TC Post Classifier

☐ Non-classification issue/other, return to Originating TC/AU _____

REASON:

Section II b. DISPOSITION BY RECEIVING TC POST CLASSIFIER

☐ This dispute was resolved. Forward to TC/AU _____ Class/Sub _____ Post Classifier _____ Date _____

Concurring _____ Date _____

☐ This dispute was not resolved, forward to DISPUTE RESOLUTION PANEL

Post Classifier Assessment:

Gatekeeper Concurrence _____

Post Classifier _____

Date _____

Section III. DISPOSITION BY DISPUTE RESOLUTION PANEL

Date _____

Panel Decision: Forward to Technology Center / Art Unit _____ Class/sub _____

REASON:

Panel Member _____ Concurring Panel Member _____

☐ This application MAY NOT be returned to the dispute resolution panel. THIS IS A FINAL DISPOSITION.

From: Pyon, Harold
Sent: Tuesday, April 30, 2002 7:04 PM
To: Ahmad, Nasser; Aughenbaugh, Walter; Chevalier, Alicia; Dye, Rena; Egan, Brian; Hon, Sow-Fun; Loney, Donald; Miggins, Michael; Nolan, Sandra; Patricia Nordmeyer (E-mail); Patterson, Marc; Rhee, Jane; Simone, Catherine; Thomas, Alex; Watkins, William
Subject: FW: CIRCUIT BOARD CASES

Please see below.

Please let me know if you see any printed circuit board or substrate cases.

Thanks,

-----Original Message-----

From: Reichard, Dean
Sent: Tuesday, April 30, 2002 6:30 PM
To: Pyon, Harold
Subject: CIRCUIT BOARD CASES

Hello Mr. Pyon,

If, when you are classifying cases, you think claims are drawn to a "printed circuit board" or a "substrate" please transfer the case to art unit 2827. The examiners who handle those cases are Kammie Cuneo and Jeremy Norris. They used to be in this art unit (2831), but not anymore. We still take most of class 174, but just those subclasses (250-270) now go to art unit 2827.

Thank you,

Dean Reichard

SPE, Art Unit 2831

308-3682

11/12/02

Alex,
Claims say recite that the
holes ~~are~~ are at "circuit" formed positions.
Should be enough to send it to 174/250⁺ → AU
under the attached class definition lines. 2827
Conductor/insulator for circuit use. If sec
it is not possible to get it out of the 950e
sector it would be a 428/131⁺ case.

Thanks/
W. Watkins

CLASS 174, ELECTRICITY: CONDUCTORS AND INSULATORS**SECTION I - CLASS DEFINITION**

1. This class is for inventions relating to the structure of electrical conductors and insulators and insulators and the apparatus specialized to mounting, supporting, encasing in conduits, and/or housing the same.

2. Conductors may be bare or be encased in insulation, may be single strand or plural strand, may be of single conductor form or there may be a plurality of conductors associated together to form a cable.

3. Since all materials that have the property of being conductors of electricity and all devices made therefrom may be termed electrical conductors, only those structures that are specially designed to conduct electricity as their proximate purpose are placed in this class.

4. Insulators are placed here when the structure thereof is claimed, which structure is specially designed for spacing two or more devices of different electrical potential from each other or for spacing one or more devices from ground.

5. Since all materials which are poor conductors of electricity and devices made therefrom may be termed electrical insulators, only those structures whose proximate purpose is that stated in the preceding paragraph are placed in this class.

6. Conduits are placed in this class only when some characteristic is claimed which limits the same to the electrical use. For reasons above stated, the fact, claimed or unclaimed, that the conduit is made of electrically conductive and/or insulative material, will not cause classification in this class. Cable systems and components are classified elsewhere. See References to Other Classes, below.

SECTION II - LINES WITH OTHER CLASSES AND WITHIN THIS CLASS

1. Housings (boxes, receptacles, containers, etc.) are placed in this class only when limited to electrical use. The mere fact, claimed or unclaimed, that the material of which the box or housing is composed is conductive, and/or insulative, will not cause classification in this class. See D, Housing, Boxes Or Receptacles, below. To be classified in this class, the claims must include some structure which limits the box or housings to elec-

trical use. The recitation that the box or housings include an electrical device, recited by name only, is sufficient to cause classification in this class even though no other structure is recited which limits the box or housings to electrical use. This class includes as boxes, housings or envelopes such as are used for electric lamps, electric space discharge devices, and similar electrical devices which are enclosed in vitreous, ceramic, nonmetallic plastic or metallic housings or envelopes. Where such subject matter is otherwise properly within the scope of this class, the mere naming of the type of lamp or discharge device as being the device within the housing or envelope will not exclude the patent from this class. Neither will the recitation of an electrode broadly recited within the housing or envelope exclude the patent from this class although if the electrode is claimed as a filament, anode, grid or other specific electrode, the patent will be excluded. Also, the recitation of electrode supporting structure when broadly recited or when recited so as to be of general utility will not exclude the patent from this class. For example, means for supporting an electrode assembly, or lead-in wires supporting an electrode will not exclude the patent from Class 174. Where the supporting structure is limited to use with electric lamp or discharge device structure, the patent is excluded from Class 174 and will be found elsewhere. For such envelopes and housings in this class, where the envelope is provided with means peculiarly adapted for use in connection with a vacuum, gas or fluid (but not merely a hermetically sealed envelope designed for use with a vacuum or gas filling where no structure peculiarly adapted for use with a vacuum or fluid except the hermetic seals is claimed) see Subclass References to the Current Class, below. Where the structure includes a current conductive fluid (e.g., a liquid used as a part of the lead-in structure) or where a vacuum is used (e.g., as a space around the lead-in designed to be continuously evacuated to reduce leakage of air or gas), see Subclass References to the Current Class, below. Where the envelope or housing has combined therewith means for feeding, circulating or distributing a fluid including means to cool the fluid or has means to cool the box or housing or the device therein where the cooling means involves the use of a fluid, see Subclass References to the Current Class, below. For miscellaneous envelopes, boxes and housings, see Subclass References to the Current Class, below. For miscellaneous hermetically sealed envelopes and housing (including housings which are provided with an evacuating stem or opening or which use a liquid to form the hermetic seal) see Subclass References to the Current Class, below. For structures which are bushings or other devices for insulating a conductor or object from a wall or plate through which the conduc-

shaft. See, particularly, subclasses 98+ for a fracturable building component, subclass 105 for a component with indicia, subclass 177 for a component having a specified wear or friction surface, subclasses 311.1+ for an ornamental or decorative component, subclasses 393+ for a yieldable component, subclasses 474+ for a panel held by a preassembled or prepositioned frame or shaft, subclasses 596+ for a stone-like module, subclass 631 for a bent component, subclasses 633+ for an openwork component, subclasses 656 for a frame, per se, subclasses 716.1+ for an in situ attached-type channel or trim member, and subclasses 782.1+ for a composite laminate with a disparate edging or an imperforate face.

Class 109 provides for safes and components thereof, bank protection and related devices, and in subclass 495 provides for a shield or protector for preventing a projectile, or knife or sword, or bomb fragment from contacting a person or thing. This could be a portable device or one which attaches (i.e., has attaching means such as belts, straps, etc.) to a bomb for containing the fragments.

Class 160 provides for a panel structure for use in a flexible or portable closure or partition, especially in subclasses 385+ for fabric having a modified edge (e.g., loops) for attachment to an elongated support.

Class 180, subclass 68.6 provides for an article* which is a motor vehicle radiator protector.

Class 228, subclass 56 provides for a metal article* useful as filler material in a metal fusion bonding operation.

Class 238 provides for an article* which is a railroad rail.

Class 248, subclass 248 provides for an article* which is a shelf support made from a single blank. The blank itself is classified in this class (428).

Class 283, subclasses 74+ provides for an identification card having printed matter thereon.

Class 404 provides for a road or pavement which has structure peculiar for pedestrian or vehicular traffic. A laminated or layered* product with no structure which peculiarly adapts it for use for vehicles or pedestrians, such as a crown, grading, contour, etc., is classifiable in Class 428.

Class 405, subclasses 276+ provide for metallic sheet piling.

Class 425, subclass 470 provides for a shaping or casting surface for nonmetal material.

Class 588, provides for the production of articles made with or from hazardous or toxic waste to contain the waste.

4. Electric and magnetic elements. The classes listed below, with the exception of those marked with the symbol "#", do not provide for electric or magnetic stock-materials*. The marked classes or portions of classes provide for stock-material* only when such material has a claimed internal or external structure which makes the material of utility only in a single class. In general, an electrode is either an article* for the classes listed, a stock-material* for this class (428), or a composition for a composition class, notably Class 75, or Class 252, subclasses 500+.

Class 136, subclasses 236+ provide for thermocouple junction stock-material*.

Class 148, subclasses 33+ provide for P-N junction stock-material* made by a process of that class.

Class 174 provides for stock-material* in the form of an electrical conductor with a covering of dielectric material wherein the conductor includes structure disclosed to be specially designed to conduct electricity, or the dielectric includes structure disclosed to be specifically designed to space the conductor from ground or from a device of otherwise different potential.

Class 191, subclass 22 provides for conductive articles* specifically designed to transmit electricity to vehicles.

Class 200, subclasses 262+ provide for electric switch contact elements which go beyond stock-materials*, e.g., by having two spaced conductors, etc.

Class 204, subclasses 194+ for articles which are elements of an electrolytic apparatus.

Class 219, subclasses 145+ and 552+ provide for articles* which are electric heating elements.

Class 257, Active Solid-State Devices (e.g., Transistors, Solid-State Diodes), provides for electronic devices or components that are made up primarily of semiconductor materials which operate by the movement of charge carriers - electrons or holes - which undergo energy level changes within the material and can modify an electrical input to achieve rectification, amplification or